Title (en)

SYSTEM AND METHOD FOR PROVIDING IMPROVED DISPLAY QUALITY BY DISPLAY ADJUSTMENT AND IMAGE PROCESSING USING OPTICAL FEEDBACK

Title (de)

SYSTEM UND VERFAHREN ZUR BEREITSTELLUNG VON VERBESSERTER ANZEIGEQUALITÄT DURCH ANZEIGEEINSTELLUNG UND BILDVERARBEITUNG UNTER VERWENDUNG VON OPTISCHER RÜCKMELDUNG

Title (fr)

SYSTÈME ET PROCÉDÉ POUR FOURNIR UNE QUALITÉ D'AFFICHAGE AMÉLIORÉE PAR AJUSTEMENT D'AFFICHAGE ET TRAITEMENT D'IMAGE EN UTILISANT UNE RÉTROACTION OPTIQUE

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Application

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Abstract (en)

[origin: WO2008115464A1] This invention provides an improved display system and method that is created by adjusting the properties of one or more displays to obtain coarse control over display behavior, by using sensors to optimize display parameters. The display is further improved by constructing a display map by selectively driving the display and sensing the optical image created. Furthermore, the sensors are used to ensure that the resulting optimized display meets target quality measurements over time, potentially taking into account ambient conditions. The system reports on its status, and is able to predict when the system will no longer meet a quality target. The system and method is able to optimize a display system and keep it optimized over time. Individual displays with the display system can have operating points that are matched to each other. Corrections to the input image signal to deliver improved display system performance can be minimized, and therefore, the unwanted artifacts of those changes can be minimized. If the displays drift over time, those operating points can be updated. If ambient conditions change, and new operating points are desired, the new operating points can be automatically selected. Operators of the display who require a minimum level of quality for the display system (e.g. a minimum intensity level) can be ensured that the display meets those requirements. And, they can be warned in advance as to when system maintenance can be necessary, when quality falls below targeted goals system and method provides for sending out methods of the quality of the system such an in an e- mail, perhaps in the form of graphs. Or, the system in method allows for prediction of when quality targets will not be met. Prediction is useful for a display system operator who needs to know when to perform maintenance, such as changing a light bulb (light source) in a projector.

IPC 8 full level

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